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TO:	FROM:
Examiner Jonathan J. JOHNSON	Stephen T. Neal
COMPANY:	DATE:
USPTO	November 3, 2005
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(571) 273-8300	15
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
	12553/94
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10/603,444	Group Art Unit: 1725

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APPEAL BRIEF

1. Fax Cover Sheet (1)
 2. Transmittal Form (1)
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A handwritten signature in cursive script that reads 'Barbara Vance'.

Barbara Vance

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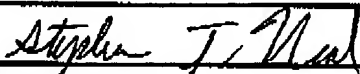
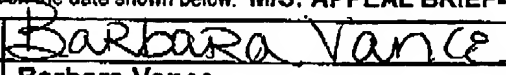
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/603,444	
	Filing Date	June 24, 2003	
	First Named Inventor	Ming Gao YAO et al.	
	Art Unit	1725	
	Examiner Name	Jonathan J. JOHNSON	
Total Number of Pages in this Submission	15	Attorney Docket Number	12553/94

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ENCLOSURES (check all that apply)		
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Printed Name	Stephen T. Neal		
Date	November 3, 2005	Reg. No.	47,815
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Signature			
Typed or printed name	Barbara Vance	Date	November 3, 2005

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**FEE TRANSMITTAL
for FY 2005**

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$)** 500.00

Complete if Known

Application Number 10/603,444

Filing Date June 24, 2003

First Named Inventor Ming Gao YAO et al.

Examiner Name Jonathan J. JOHNSON

Art Unit 1725

Attorney Docket No. 12553/94

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Large Entity		Small Entity		Fee Description	Fee Paid
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1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims		Fee from below		Fee Paid
Total Claims	<input type="text"/>	-20 **	=	<input type="text"/>	X	60.00	=
Independent Claims	<input type="text"/>	-3 **	=	<input type="text"/>	X	200.00	=
Multiple Dependent					X	<input type="text"/>	=

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	50	2202	25	Claims in excess of 20	
1201	200	2201	100	Independent claims in excess of 3	
1203	350	2203	180	Multiple dependent claim, if not paid	
1204	200	2204	100	Reissue independent claims over original patent	
1205	50	2205	25	Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$)

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FEE CALCULATION (continued)

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1,500	2453	750	Petition to revive - unintentional	
1501	1,400	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

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SUBMITTED BY

Name (Print/Type)	Stephen T. Neal	Registration No. (Attorney/Agent)	47,815	Telephone	(408) 975-7500
Signature	<i>Stephen T. Neal</i>	Date	November 3, 2005		

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NOV 03 2005

Patent

Attorney Docket No.: 12553/94

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Ming Gao YAO et al.
SERIAL NO. : 10/603,444
FILED : June 24, 2003
FOR : SYSTEM AND METHOD FOR MANUFACTURE OF A
HARD DISK DRIVE ARM AND BONDING OF
MAGNETIC HEAD TO SUSPENSION ON A DRIVE
ARM
GROUP ART UNIT : 1725
EXAMINER : Jonathan J. JOHNSON

VIA FACSIMILE

M/S: APPEAL BRIEF – PATENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Dated: November 3, 2005	Signature: <u>Barbara Vance</u> Barbara Vance

ATTENTION: Board of Patent Appeals and Interferences**APPEAL BRIEF**

Dear Sir:

This brief is in furtherance of the Notice of Appeal, filed in this case on September 6,
2005.

11/04/2005 CNGUYEN 00000066 110600 10603444

01 FC:1402 500.00 DA

Application No.: 10/603,444
Date: November 3, 2005
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1. REAL PARTY IN INTEREST

The real party in interest in this matter is SAE Magnetics (H.K.) Ltd. (Recorded November 17, 2003, Reel/Frame 014698/0612).

2. RELATED APPEALS AND INTERFERENCES

There are no related appeals.

3. STATUS OF THE CLAIMS

Claims 16-28 are pending in the application. Claims 16-23 were rejected under 35 U.S.C. §103(a). Claims 24-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

4. STATUS OF AMENDMENTS

No amendments are currently outstanding.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 16 recites a method for manufacturing a data storage device. A placement device 305 physically stabilizes a hard drive head device 321 for electrical bonding of the head device 321 to a hard drive arm component 324. (*See Figure 3 and p. 5, paragraph 14*). The placement device 305 also physically stabilizes the hard drive arm component 324. (*See Figure 3 and p. 5, paragraph 14*). The placement device 305 uses sub-ambient pressure to

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maintain the position of said head device 321 with respect to said arm component 324 for said electrical bonding. (See **Figure 3** and p. 5, paragraph 14).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 16-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of U.S. Patent No. 3,566,207 to Adams et al., (hereinafter "Adams").

7. ARGUMENT

A. Claims 16-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over the AAPA in view of Adams.

Independent claim 16 of the present invention describes a method for manufacturing a data storage device. A placement device physically stabilizes a hard drive head device for electrical bonding of the head device to a hard drive arm component. The placement device also physically stabilizes the hard drive arm component. The placement device uses sub-ambient pressure to maintain the position of said head device with respect to said arm component for said electrical bonding. Claims 17-23 depend from claim 16.

Appellants respectfully submit that neither the AAPA or Adams teach or suggest the placement device physically stabilizing the hard drive head device and the hard drive arm component, as recited in claims 1, 9, and 19. Adams, which discloses using vacuum chuck to mount a silicon chip on a gold-surfaced mounting pad, does not disclose this feature nor, does the Examiner claim that it does. (See Col. 3, lines 68-75). Instead, the Examiner relies on the AAPA as embodied in Figure 2. The AAPA states:

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A base support 211 and a first clamping cover 220 stabilize the magnetic head 202. A second clamping cover 221 stabilizes the suspension tongue 206. A second base support (not shown) secures the load beam 212.

(See AAPA, p. 3, paragraph 4).

In other words, the AAPA has one device, the clamping cover 220, stabilizing the magnetic head device and a second device, the second base support, securing the load beam 212, rather than a single placement device stabilizing both. Therefore, the cited references do not disclose all the elements of the claim, as set forth in claims 16. Appellants respectfully submit, therefore, that elements of claim 16 are neither shown nor suggested by the cited reference. Claims 17-23 depend from claim 16.

In addition and in the alternative, Appellants respectfully submit that there is no suggestion or motivation to combine the background of the application and Adams beyond the impermissible use of hindsight. The Examiner references Col. 3, lines 50-75 of Adams as providing a motive to combine. The relevant portion of Adams cited by the Examiner states:

Alternatively, the chip 14 may be held in a vacuum chuck 64, also shown in FIG. 5, for placing the chip 14 on the mounting pad 16 of the lead frame 18, and may be employed for applying slight pressure downwardly, if desired, of a magnitude of about a few grams. (Adams, Col. 3, lines 68-75).

Adams clearly provides no such motive to combine, as the portion cited by the Examiner does not state what advantage may come from replacing the clamps of the AAPA with the vacuum chuck of Adams. Such motive would have to come from the AAPA, meaning that the motive combine came from the Appellants own insight.

Therefore, Appellants submit that a *prima facie* case of obviousness has not been made. The MPEP requires that the references must suggest making the combinations. MPEP §2141.01 (citing *Hodosh v. Block Drug Co., Inc.*); §706.02(j) (the initial burden is on

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the examiner to provide a convincing line of reasoning with explicit or implicit suggestions to combine references).

Merely stating that it would have been obvious for a person of ordinary skill in the art to combine references, without pointing to a specific hint or suggestion to combine, has been rejected by the Federal Circuit, as an invalid basis of rejection under 35 U.S.C. §103. *In re Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (the court rejected a conclusory statement that it would have been obvious to combine the references without evidence of a teaching, motivation, or suggestion to select and combine the references, citing numerous cases); *In re Dembiczak*, 175 F.3d 994,999 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”) It would be impossible for these references to be combined minus hindsight. Any motive to combine present in the background section of the application would be from the applicant or hindsight and not the result of any prior art.

Accordingly reconsideration and withdrawal of the rejection of claims 16-23 under 35 U.S.C. §103(a) is respectfully requested.

Appellants therefore respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner’s decision rejecting claims 1-26 and direct the Examiner to pass the case to issue.

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APPEAL BRIEF -- PATENT

The Examiner is hereby authorized to charge any additional fees, which may be necessary for consideration of this paper to Kenyon & Kenyon Deposit Account No. 11-0600.

Respectfully submitted,

KENYON & KENYON

Date: November 3, 2005

By: 

Stephen T. Neal
(Reg. No. 47,815)

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Date: November 3, 2005
APPEAL BRIEF – PATENT

APPENDIX

(Brief of Appellant Ming Gao YAO et al.
U.S. Patent Application Serial No. 10/603,444)

8. CLAIMS ON APPEAL

16. A method for manufacturing a data storage device comprising:
physically stabilizing, by a placement device, a hard drive head device for electrical bonding of said head device to a hard drive arm component;
physically stabilizing, by the placement device, the hard drive arm component; and
utilizing, by said placement device, sub-ambient pressure to maintain the position of said head device with respect to said arm component for said electrical bonding.
17. The method of claim 16, wherein said hard drive head device is a hard disk drive magnetic head.
18. The method of claim 17, wherein said hard drive arm component is a suspension tongue.
19. The method of claim 16, wherein said electrical bonding is ball bonding.
20. The method of claim 19, wherein said electrical bonding is a type selected from the group consisting of gold ball bonding (GBB), solder bump bonding (SBB), ultrasonic welding, and stitch bonding.
21. The method of claim 20, wherein said placement device includes a first vacuum tube structure for providing said sub-ambient pressure to affix said first vacuum tube structure to said

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head device.

22. The method of claim 21, further comprising:
providing an alignment pin protruding from said placement device.
23. The method of claim 22, wherein said alignment pin is capable of being inserted into a suspension tooling hole for ensuring said proper alignment.
24. The method of claim 22, further comprising:
providing sub-ambient pressure, by a second vacuum tube;
vacuum-coupling said first vacuum tube structure to said head device; and
vacuum-coupling said second vacuum tube structure to a suspension load beam attached to said arm component.
25. The method of claim 24, wherein the first vacuum tube structure includes a step structure mate-able to an edge of the head device.
26. The method of claim 25, wherein said step structure is mate-able to at least the leading edge of said head device.
27. The method of claim 24, wherein said first vacuum tube structure is a material selected from the group consisting of Stainless Steel, Copper, Aluminum Oxide, Polyimide, and Ceramic.

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28. The method of claim 24, wherein said second vacuum tube structure is a material selected from the group consisting of Stainless Steel, Copper, Aluminum Oxide, Polyimide, and Ceramic.

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Date: November 3, 2005

APPEAL BRIEF – PATENT

9. EVIDENCE APPENDIX

No further evidence has been submitted with this Appeal Brief.

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Date: November 3, 2005
APPEAL BRIEF - PATENT

10. RELATED PROCEEDINGS APPENDIX

Per Section 2 above, there are no related proceedings to the present Appeal.